上拉式磁悬浮安装教程

元件焊接清单（不会看电阻色环的朋友可以看电路板焊接图片对应电阻颜色焊接）

元件备货清单				
元件名称	元件标号	参数	封装	数量
电解电容	C1	470UF/16V	EC_D6.0/L8.0	1
独石电容	C2, C3, C4	1UF	独石电容1UF	3
整流二极管	D1	1N4007	DIODE0.4	1
2P插针	J1, J3	CON2	XH2.54-2孔	2
4P插针	J2	CON4	XH2.54-4孔	1
NPN三极管	Q1	D882	TO-126	1
金属膜电阻	R1	9.1K	AXIAL0.4	1
金属膜电阻	R2	1.5K	AXIAL0.4	1
金属膜电阻	R3	620R	AXIAL0.4	1
金属膜电阻	R4, R10	20K	AXIAL0.4	2
金属膜电阻	R5, R6, R8, R19, R20	1K	AXIAL0.4	5
金属膜电阻	R7, R17	5.1K	AXIAL0.4	2
金属膜电阻	R9, R13, R14, R15	10K	AXIAL0.4	4
金属膜电阻	R11, R12	100K	AXIAL0.4	2
3296电位器	R16	2K	3296W电位器	1
稳压芯片	U1	78L05	TO-92	1
集成芯片	U2	LM324N	DIP14	1
集成芯片	U3	NE555	DIP8	1
集成芯片		HW-101A 丝印G	焊接注意方向	1
IC座			DIP8	1

Pull-up magnetic levitation installation tutorial

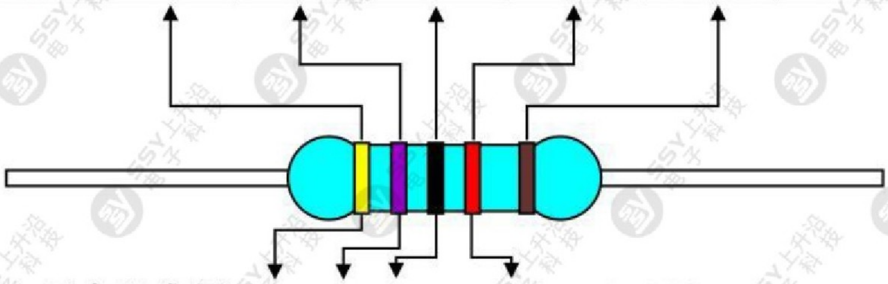
Component Weld List for those who don't know how to resist looking at the colour ring, see the weld board diagram for the circuit sheet

Corresponding resistance

电阻色环识别

倾听客户的声音·解决客户的需求

颜色	第一段	第二段	第三段	乘数	误差	
黑色	0	0	0	1		
棕色	1	1	1	10	±1%	F
红色	2	2	2	100	±2%	G
橙色	3	3	3	1K		
黄色	4	4	4	10K		
绿色	5	5	5	100K	±0.5%	D
蓝色	6	6	6	1M	±0.25%	C
紫色	7	7	7	10M	±0.10%	B
灰色	8	8	8		±0.05%	A
白色	9	9	9			
金色				0.1	±5%	J
银色				0.01	±10%	K
无					±20%	M



以上面电阻为例：4　7　0　X100　=47000R=47K

单位换算：

1K=1000R

10K=10000R

100K=100000R

1M=1000K=1000000R

10M=10000K=10000000R

1、电子元器件安装

1.Electrical components installation

Solder the components in accordance with the circuit screen, without reversing the connections.□□□

1. First solder the resistors and yellow capacitors (both non-polar) an solder them according to the resistance values shown in the diagram.



按照电路板丝印焊接元件，不要接反。

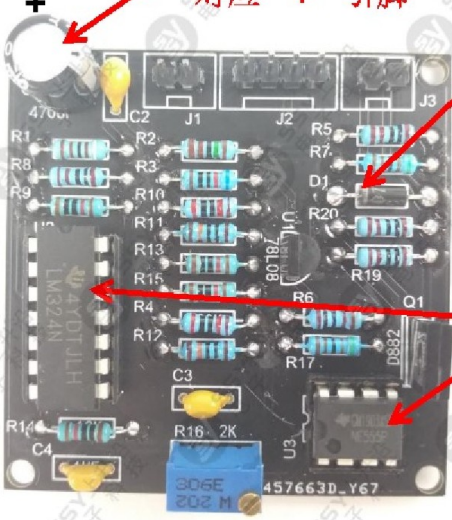
1、首先焊接电阻和黄色电容（均无极性），按照图示阻值进行焊接；

Electrolytic capacitors left to be soldered at the end, long pin corresponds to "+"

电解电容留到最后焊接，长脚对应“+”引脚

Mind the ring!

灰色是负极

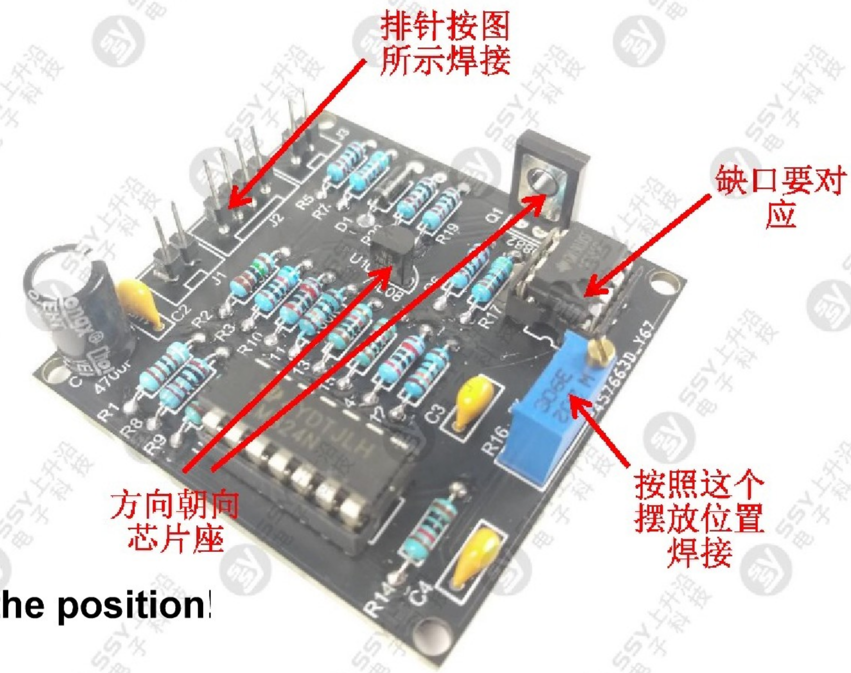


2、焊接芯片座，缺口位置要对应

Note the location of th notch in the housing

3. Welding of tri-poles

3、焊接三极管；



Note the position!

小的那个电路板芯片焊接注意看图片里面文字说明方向

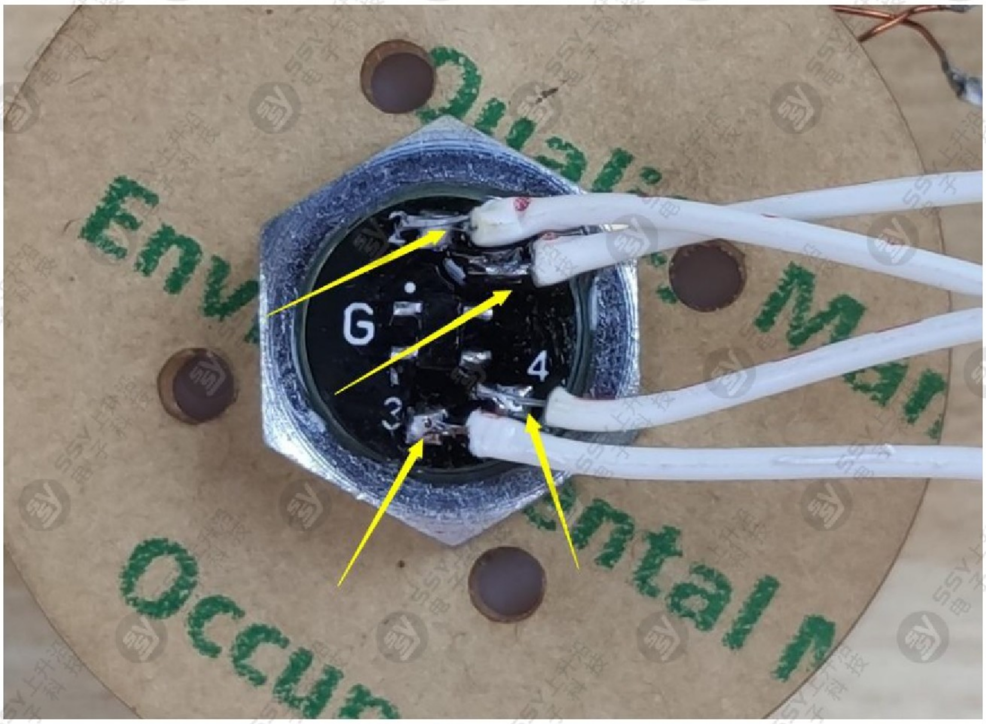
The board chip is soldered in the direction indicated by the text on the inside of the drawing.



这四条线安顺序焊接到电路板上，注意要跟另一个电路板的顺序对应

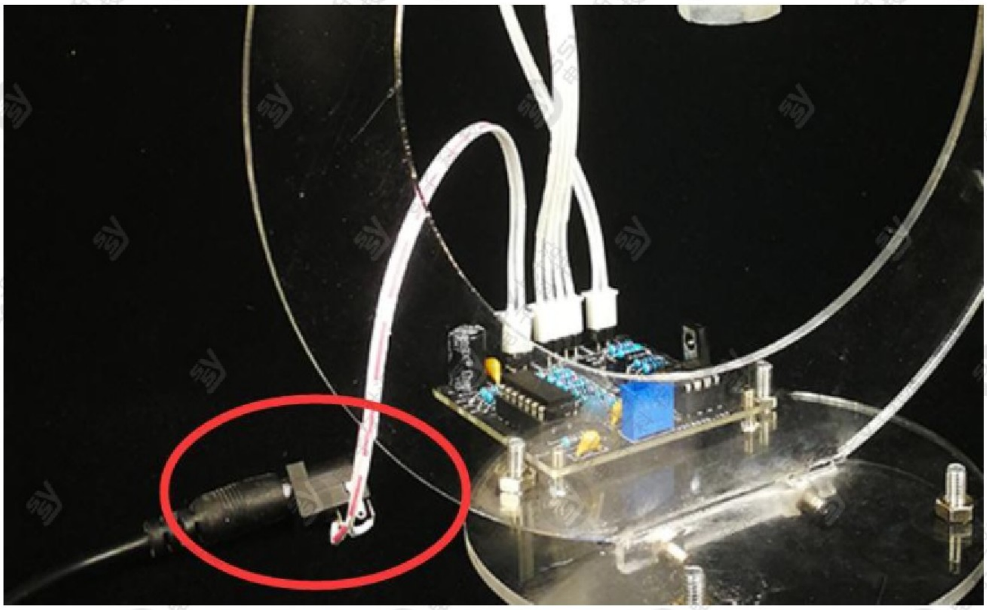
上 **1234** 对应 **1234**

The four wires are soldered to the board in sequence, taking care to match the sequence of the other board.□ on 1234 to 1234





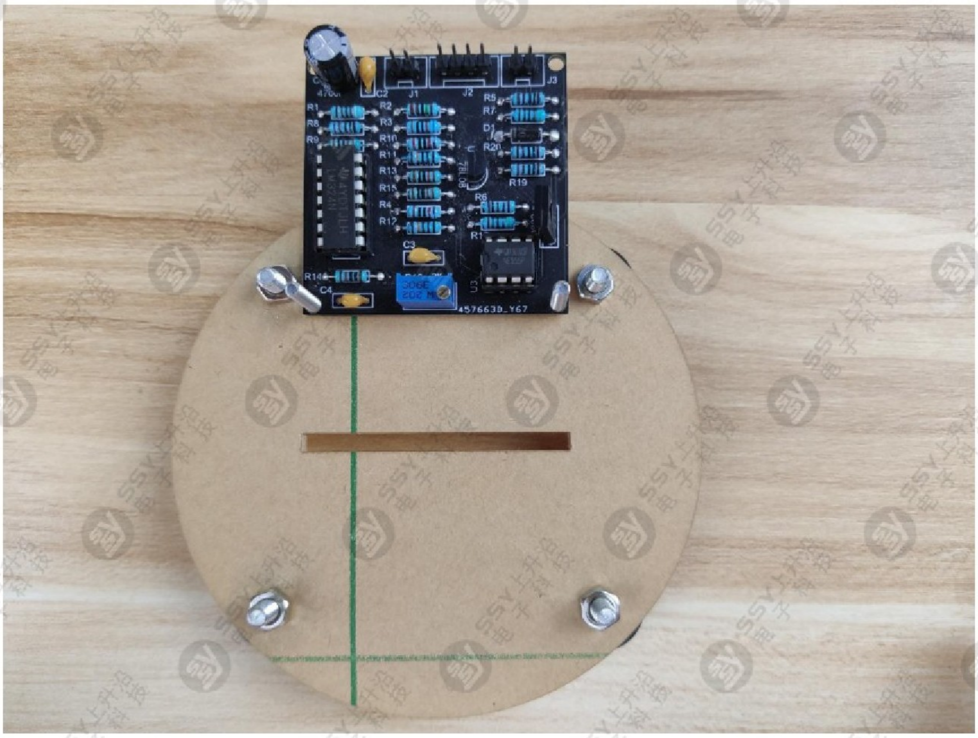
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2、支架安装

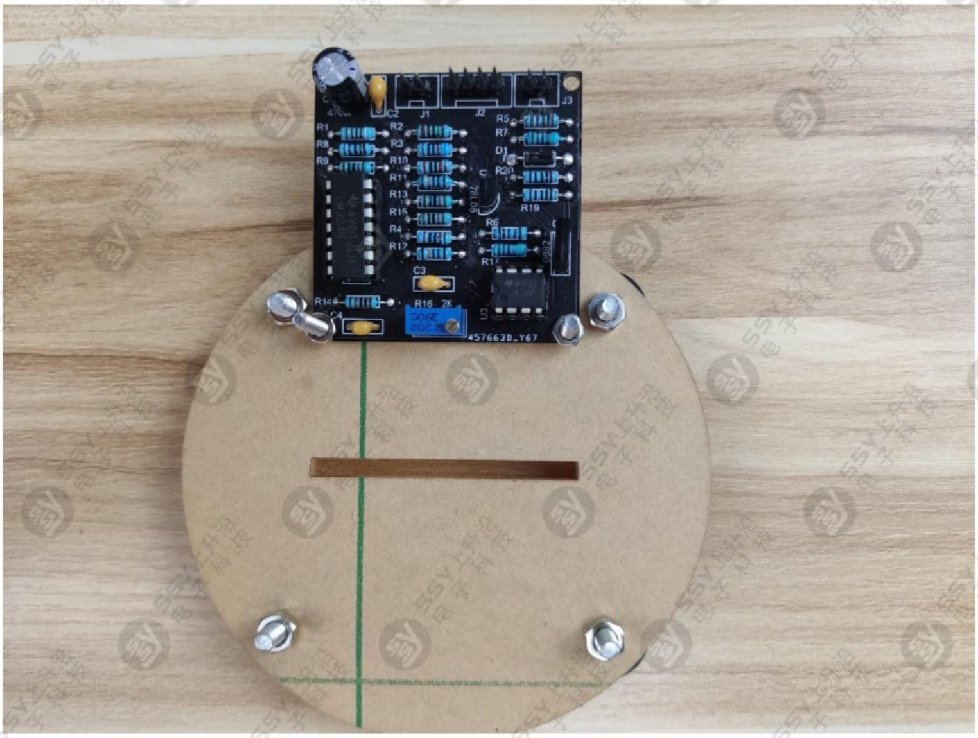
先把电路板放进底盘的螺丝内，

2. Mounting bracket□Put the circuit board into the screws of the chassis first.

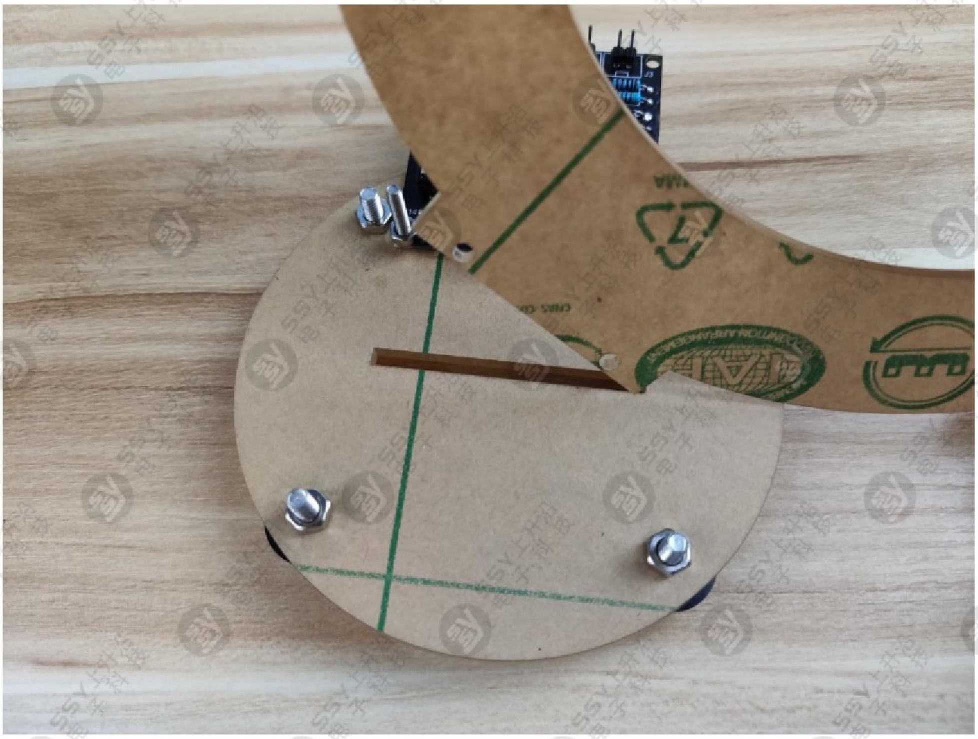


（1）

使用螺母固定电路板，

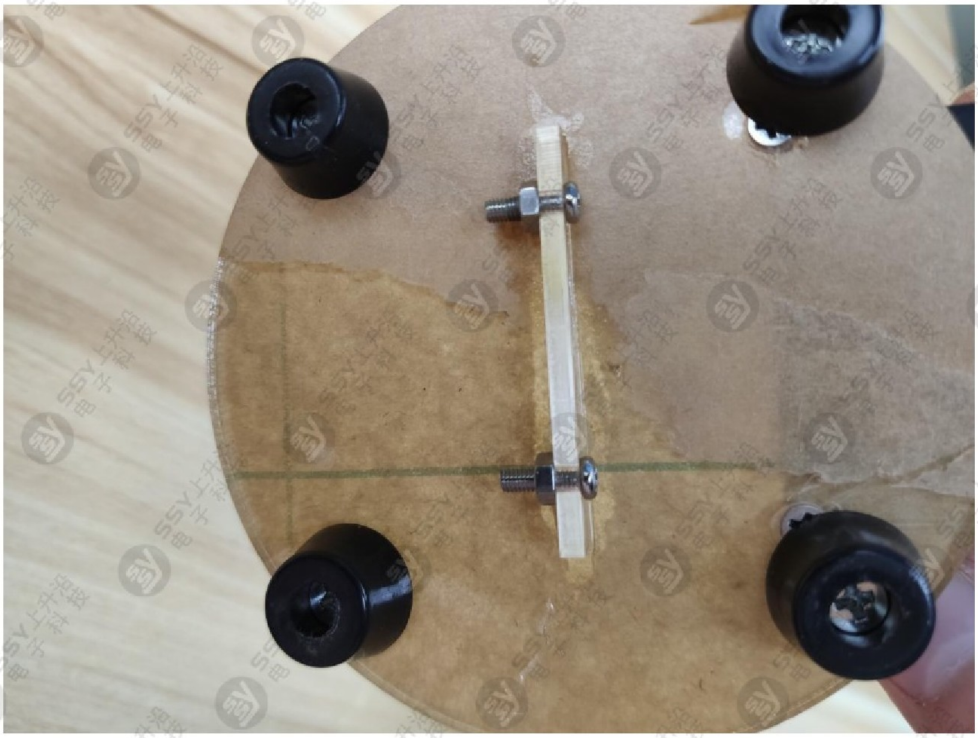


（2）



（3）

用螺丝和螺母固定，



（4）

使用螺丝和螺母将线圈和亚克力圆盘固定在一起，注意：如图下是拧螺母的那边，另一边用来粘小电路板

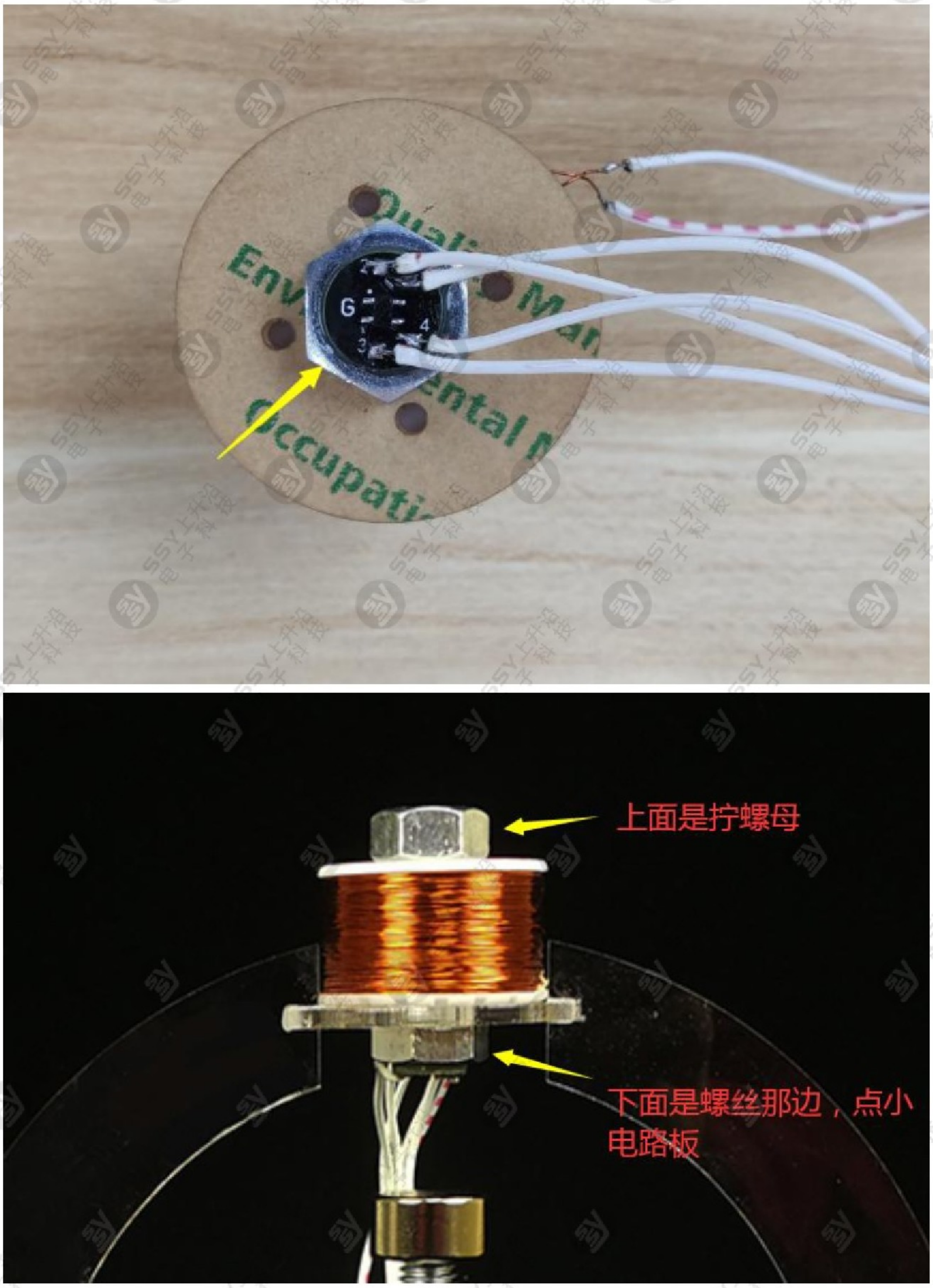
Use the screws and nuts to fix the coils to the subrigid discs, starting with□Use the nut side and the other side to attach the circuit board.



（5）

使用胶水将传感器和螺丝粘贴在一起，如图；注意：是螺丝那边粘电路板，螺母那边上面，不要弄错方向，因为拧螺母那边的头不平，不好粘电路板，螺母那边粘了胶水的话会拆不出来了

Use the glue sensor to glue the screws together as shown in the picture; note that it is the screw side that is glued to the circuit board.□Do not make a mistake, because the head of the nut is not flat on the screwed side.□□□
If you glue the nut on the side of the board,
it will not come out.



（6）

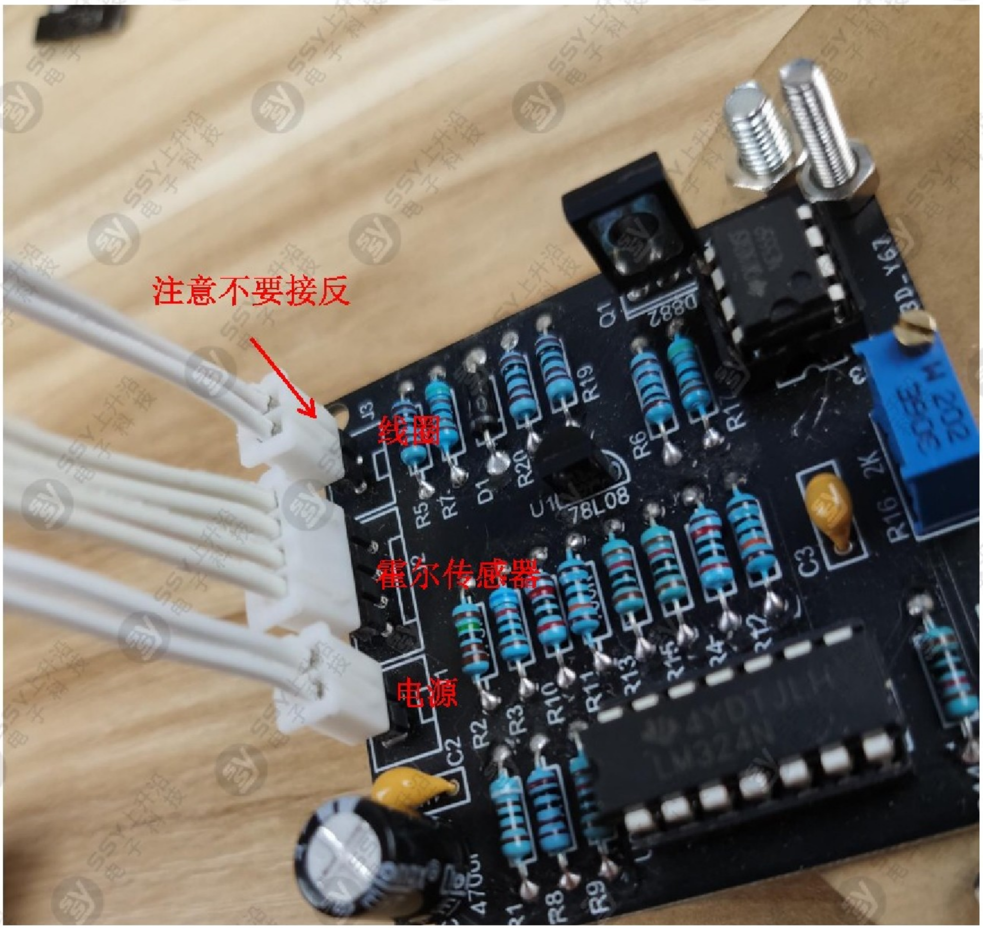
使用胶水固定

Glued in place



（7）

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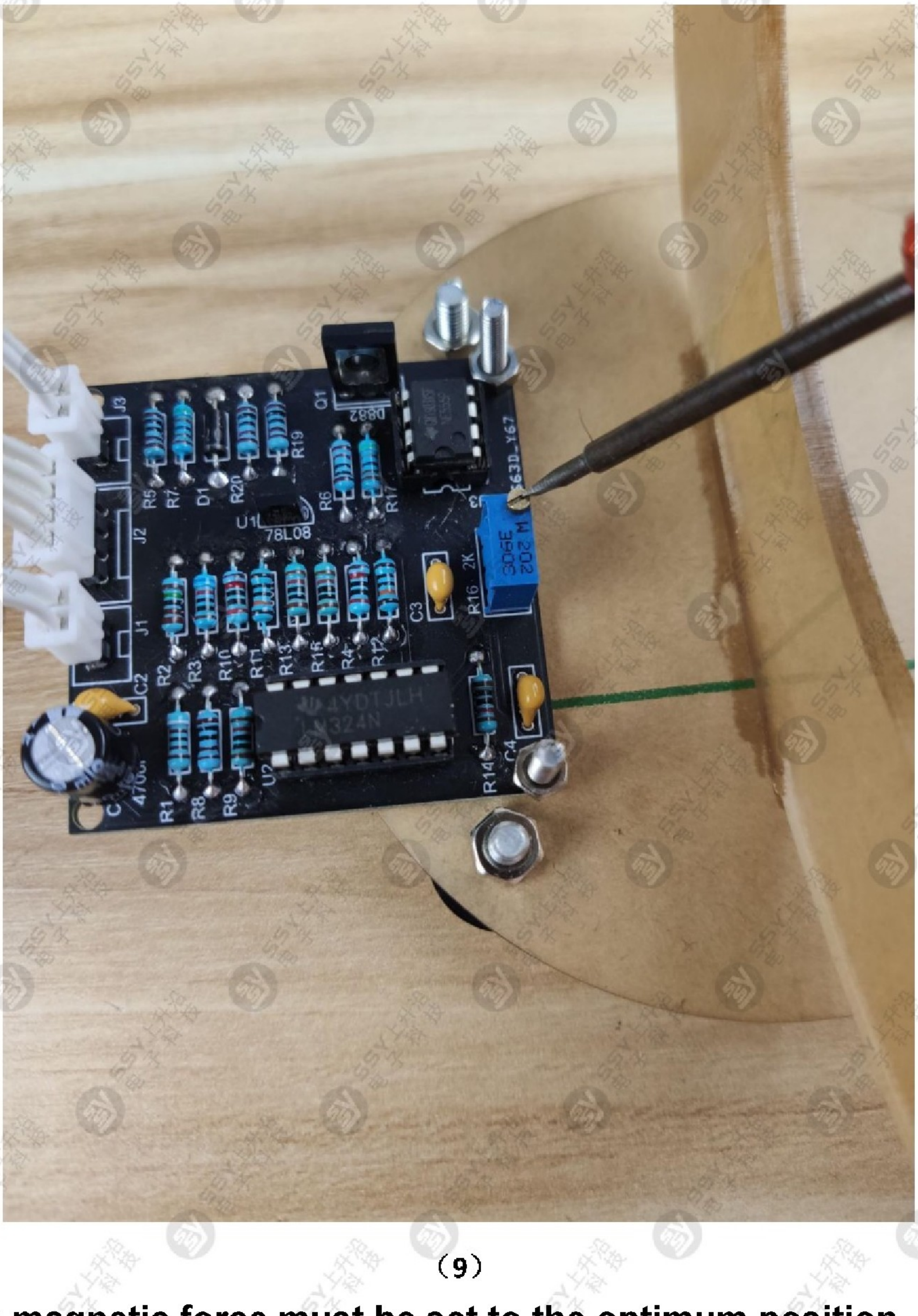


3. Place the floating object□Firstly, connect to the power supply, then hold the magnet from the bottom of the coil towards the top and slowly collapse close to the coil at a distance of 2cm.□ If the magnet is not strong enough, you can adjust the blue resistor on the circuit board for adjustment. □If the magnetic force is not sufficient, the blue resistive adjustment on the board can be adjusted to reduce the magnetic force when the clock is turned clockwise and to increase the magnetic force when the clock is turned counterclockwise.

3、放置悬浮物

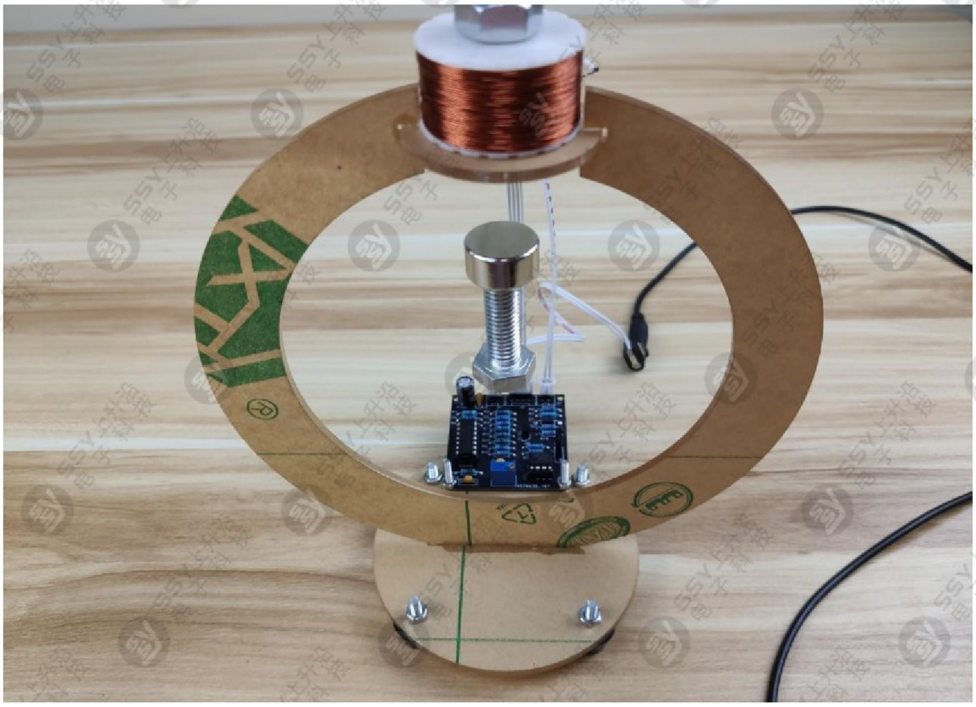
先接上电源，然后拿住磁铁从线圈下面向上慢慢靠近线圈，距离 2 公分的时候，能感应到线圈提供的吸引力，稳定后再放手，如果磁力不够，可以调节电路板上蓝色可调电阻进行调试，顺时针是减小磁力的；逆时针是增加磁力的，

磁力要调到最佳位置，磁力既不能太大 也不能太小，刚好能拉动磁铁就可以，不然会抖动。



(9)

The magnetic force must be set to the optimum position, neither too high nor too low, just enough to pull the magnet, otherwise it will stir.

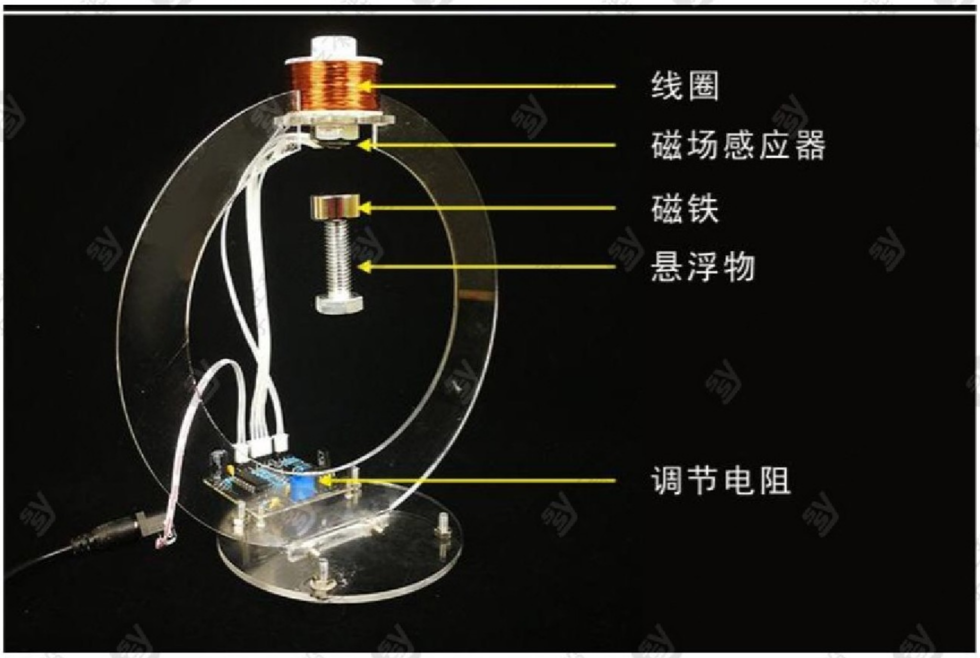


Products on display□Remove the protective paper before installation.



名称：上拉式磁悬浮	悬浮重量：最大200克
电源：12V/2A	悬浮距离：最大2cm
功率：2-5W	产品重量：300克左右

SSY上升沿电子科技



注意事项：

1. 通电情况下不要让磁铁吸附在线圈上，不然很容易损坏电路板。

2. 长时间放浮子不成功会使电路板内部瞬间电流较大，三极管和线圈温度升高，建议放浮子 8 次不成功时，拔掉电源冷却后再尝试。

3. 磁铁远离手机电脑身份证，还有各种银行卡等电子设备。

Note□□ Cautions □
1. Do not allow the magnet to attach to the coil when energised, as this can easily damage the board.□□□
2. If you leave the float unsuccessful for a long period of time, the instantaneous current inside the board will be high and the temperature of the triode and coil will rise. □It is recommended that if the float does not work 8 times, the power supply should be unplugged and cooled before trying again.□
Keep magnets away from mobile phones, computers, ID cards, bank cards, electronic devices, etc.